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"The Observatory desires to keep this collection up to date, and respectfully requests that it may be favored with your publications.

Very respectfully,

"J. K. REES,

"Director of the Observatory."

TRANSLATION OF SCHEINER'S SPECTRALANALYSE.

All who are interested in the spectroscope as applied to the solution of astronomical problems will be pleased to learn that *Die Spectralanalyse der Gestirne*, by Dr. SCHEINER, Astronomer in the Royal Astro-Physical Observatory at Potsdam, is to be translated into English. It will also be revised and enlarged to include the results of the last three years, thereby bringing it up to date. The work is being done, with the assistance of the author, by E. B. FROST, of Dartmouth College Observatory, and is expected to be completed within a year.

W. W. C.

DUPLICATES IN THE LIBRARY OF THE LICK OBSERVATORY.

The following works are duplicate in the Library of the L. O. and we should be glad to exchange them for any works which are lacking in our collection—especially for a set of the maps of the northern DM.

E. S. H.

American Journal of Science: Nos. 145–156 inclusive; 1883 complete, 8vo, paper.

ARGELANDER: Abo observations 1, 2, 3 complete; bound in 1 vol., folio, half morocco.

BALL: Elements of Astronomy. 1 vol., 16mo, cloth.

BERLIN: Astronomisches Jahrbuch. 8vo. 1882 (cloth), 1883 (cloth), 1883 (paper), 1884 (cloth), 1885 (cloth), 1886 (cloth), 1886 (paper), 1887 (cloth), 1887 (half morocco), 1887 (paper), 1888 (paper). 11 vols.

BODE: Astronomisches Jahrbuch, 1795, 1796, 1797, 1798, 1800. 5 vols (cloth).

HERSCHEL and MAIN: Catalogue of Double Stars, 1874. 4to, half roan.

LAMONT: Munich Star Catalogues, 6 vols. Complete, 8vo, half roan.

LONDON: *Memoirs R. A. S.*, vol. 24, 1856. 4to, half roan.

MADRAS: Observations, 1862-3-4. 1 vol., 4to, cloth.

MAEDLER: Dorpat Observations, vol. 13, 1856. 4to, half roan.

PARIS: Annuaire Bureau des Longitudes, 1876 and 1877. 2 vols., 16mo, paper.

WASHINGTON: U. S. Naval Observatory. Eclipse Report of 1878. 4to, cloth.

WASHINGTON: U. S. Transit of Venus Commission Report 1874. I, 4to, cloth.

PRELIMINARY NOTE ON TERRESTRIAL ATMOSPHERIC ABSORPTION OF THE PHOTOGRAPHIC RAYS OF LIGHT.

As the tabular data below may be of immediate use to some astronomers, I have thought it well to publish them at once. They are deduced from an extended investigation which I took up in 1889 at the suggestion of Professor HOLDEN. The observations (exposures), measures, and the method of reduction, form the subject-matter of a memoir now being published by the University of California.

The final results are based upon four different series of observations, as follows:

First Series, at Mt. Hamilton, in September, 1889.

Second Series, at Cayenne, S. A., in December, 1889.

Third Series, at Mt. Hamilton, in July and August, 1890.

Fourth Series, at Mt. Hamilton, in November, 1891.

The exposures for the third series were kindly made for me by Professor CAMPBELL, who at the time was spending his vacation at the LICK Observatory; the other three series of exposures were made by myself. All the observations, with the exception of those belonging to the fourth series (which were made with our CROCKER telescope) were made with a 6-inch equatorially mounted DALLMEYER lens belonging to the United States Naval Observatory, and loaned to the LICK Observatory primarily for the purpose of taking it to our eclipse station at Cayenne.

Before the reduction of the observations on atmospheric absorption of the photographic rays of light could be undertaken it was evidently necessary to determine the relation which exists, for the given telescope, between the diameters of the stellar images for known exposure times and the brightness of the corresponding stars. Some results of an investigation on this subject